

BOM, LSR Wi-Fi & BLE Shield, TIWI-C-W and SaBLE-x  
 331-00690-R3.0  
 Generated 8/31/2015

Item #	Qty	PCB	Pop	Type	Value	Toleran	Description	Manufacturer	Mfg	Pkg Ref	Alt	Alt Mfg	PCB
1	2	ANT1 C1 C2		Chip			Antenna, Chip, 2400 - 2500 MHz, 50 ohms, -0.5 dBi	Johanson Technology	2450AT				3216_A
2	12	C3 C4		MLCC	100nF	+/- 10%	Capacitor, MLCC, 16V, 0402, X7R, 100nF	Murata	GRM15 L,D,E,W				
3	1	C6		MLCC	1.0uF	+/- 10%	Capacitor, MLCC, 10V, 0402, X5R, 1uF	Murata	5R71C1 ,K,J,F,B, ANY	ANY	ANY	0402	
4	1	C7		MLCC	8.2pF	0.5pF	Capacitor, MLCC, 50V, 0402, COG, 8.2pF	Murata	GRM15 L,D,E,W				
5	1	C10		MLCC	10pF	+/- 5%	Capacitor, MLCC, 50V, 0402, COG, 10pF	Murata	55C1H ,K,J,F,B, ANY			0402	
6	1	C11 C12		MLCC	1.5pF	0.25pF	Capacitor, MLCC, 50V, 0402, COG, 1.5pF	Murata	55C1H ,K,J,F,B, Murata	Any		0402	
7	3	C13		MLCC	10uF	+/- 10%	Capacitor, MLCC, 10V, 0805, X5R, 10uF	Murata	GRM15 L,D,E,W				
8	1	C17		MLCC	1.0uF	+/- 10%	Capacitor, MLCC, 6.3V, 0402, X5R, 1.0uF	Murata	55C1H ,K,J,F,B,			0402	
9	1	C18		MLCC	4.7uF	+/- 20%	Capacitor, MLCC, 4V, 0402, X5R, 4.7uF	Murata	GRM21 L,D,E,W				
10	1	C19		MLCC	1000pF	+/- 10%	Capacitor, MLCC, 50V, 0402, X7R, 1000pF	Murata	BR61A ,K,J,F,B, ANY	Any		0805	
11	2	D1 D2		TVS			Diode, TVS, SOD-882, 20KV	Infineon	ESD112				SOD88
12	1	FB1					Ferrite Bead, 0603, 1.5k Ohm @ 100MHz, 500mA	Murata	BLM18 D,J,B				0603
13	2	J12					Connector, Header Female, Right Angle TH, Black, 2 x 6, 100mil, Gold Finish	Samtec	SSQ-	Sullins	PPPC06	PMOD_	
14	2	J3 J7					Connector, Elevated Socket Strip, Header, 25mil square post, 1 x 8, 100mil, Gold Finish	Samtec	SSQ-	ANY	ANY	SIP-8P	
15	1	J4					Connector, Elevated Socket Strip, Header, 25mil square post, 1 x 10, 100mil, Gold Finish	Samtec	SSQ-	ANY	ANY	SIP-10P	
16	2	J5 J8					Connector, u.fl Jack, Vertical SMT, DC to 6 GHz, NA, NA, Gold Plated Contact	Hirose	U.FL-R- (01),(1)			HIROSE-	
17	1	J6					Connector, Elevated Socket Strip, Header, 25mil square post, 1 x 6, 100mil, Gold Finish	Samtec	SSQ-	ANY	ANY	SIP-6P	
18	2	J9 J10					Connector, Header Male, Vertical SMT, Unshrouded, 2 x 5, 50mil, Gold Finish	Sullins	GRP80			GRP80	
19	2	J1 J11					Connector, Header Male, Vertical TH, Unshrouded, 1 x 3, 2mm, Gold Finish	Sullins	NRPNO	Sullins	MAKE	HEADE	
20	1	JP1					Connector, Header Male, Vertical TH, Unshrouded, 1 x 3, 2mm, Gold Finish	Sullins	NRPNO	Sullins	MAKE	HEADE	
21	1	J12					Connector, Header Male, Vertical TH, Unshrouded, 1 x 2, 2mm, Gold Finish	Sullins	PRPNO			SIP-2P-	
22	2	JMP1					Connector, Shorting Jumper, Vertical TH, Black, 1 x 2, 2mm, Gold Finish	Sullins	SPN02S	ANY	ANY	SHUNTJ	
23	1	L1		Cerami	3.9nH	+/-	Inductor, Ceramic Core Multilayer, 0402, 3.9nH	Johanson Technology	L- T			0402	
24	1	L2		Cerami	2.7nH	+/-	Inductor, Ceramic Core Multilayer, 0402, 2.7nH	Johanson Technology	L- T			0402-	
25	1	L3		Cerami	2.2nH	+/-	Inductor, Ceramic Core Multilayer, 0402, 2.2nH	Johanson Technology	L- T			0402-	
26	1	LED1					LED, Green, Red, 20mA, 2.2V, 2.1V, 15mcd, 10mcd, 3.2mm x 2.7mm, 572nm, 626nm, Dual Color		HSMF-			HSMF-	
27	1	MOD1		LSR			SMT RF Module, SaBLE-x, PCB Trace Antenna	Avago	C155			C15X	
28	1	MOD2		LSR			RF Module, TIWI-C-W	LSR	450-			TIWI_U	
29	1	PCB1		PCB			PCB, LSR Wi-Fi & BLE Shield, TIWI-C-W and SaBLE-x	LSR	450-			TIWI-C-	
30	2	Q1 Q2		P-			Transistor, MOSFET, P-CHANNEL, SOT-23-3	LSR	750-			PCBNU	
31	2	R1 R3		Thick	20K	5%	Resistor, Thick Film, 0402, 20K	Fairchild	FDN34			SOT23	
32	2	R4 R5		Thick	0	50m	Resistor, Thick Film, 0402, 0	KOA	RK73B1 TPD,TP	ANY	Any	0402	
33	3	R2 R6	NP	Thick	0	50m	Resistor, Thick Film, 0402, 0	KOA	RK73Z1 TP,TPL	ANY	ANY	0402	
34	4	R7 R8		Thick	2.2K	5%	Resistor, Thick Film, 0402, 2.2K	KOA	RK73Z1 TP,TPL	ANY	Any	0402	
35	1	R18		Thick	10K	5%	Resistor, Thick Film, 0402, 10K	KOA	RK73B1 TP,TPL	ANY	ANY	0402	
36	5	R9 R10	NP	Thick	10K	5%	Resistor, Thick Film, 0402, 10K	KOA	RK73B1 TP,TPL	ANY	ANY	0402	
37	2	R11		Thick	390	5%	Resistor, Thick Film, 0402, 390	KOA	RK73B1 TP,TPL	ANY	ANY	0402	
38	1	R12		Thick	0	50m	Resistor, Thick Film, 0603, 0	KOA	RK73Z1 TP,TD,T	ANY	ANY	0603	
39	1	R13	NP	Thick	0	50m	Resistor, Thick Film, 0603, 0	KOA	RK73Z1 TP,TD,T	ANY	ANY	0603	
40	1	R17		Thick	4.3K	5%	Resistor, Thick Film, 0402, 4.3K	KOA	RK73B1 TP,TPL	ANY	ANY	0402	
41	1	S1		Tactile			Switch, Tactile, SPST-NO, 50mA @ 12V, SMT	Panasonic	EVQPN			PANAS	
42	1	U1		4 Bit 1-			IC, 4 Bit 1-of-2 FET Mux/Demux, 16-TSSOP, 5 Ohm Switch Connection	Texas Instruments	SN74C E4,G4			TSSOP1	
43	1	U2		Linear Buffer/ Line			IC, Linear Voltage Regulator, 6-50N, Vout=3.3V, LDO, 1A	Texas Instruments	TPS737 R.T			DRV6_	
44	1	U3		Line			IC, Buffer/Line Driver, Non-Inverting with Open Drain, SC-70-6,	Texas Instruments	SN74LV C2G07			DK-	SC70-6

Notes:

# designates mfg material package option.  
 NP designates a component that is not populated.

Substitute part qualifications:

Any substitute part must match or exceed original mfg's printed specifications.  
 Any substitute part must be 2011/65/EU RoHS Compliant.  
 Any substitute part must be REACH Compliant.  
 Any substitute part must be Conflict Minerals Compliant.  
 Any substitute capacitor, resistor, inductor must be lead-free.